Phospholipids, Plasmalogens, and Cellular Restoration Transcript

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MAPS Webinar Introduction

So the problem nowadays is I wish we can roll back the clock, go back a hundred years or so, but we cant. And some things are just never gonna change.

We can't change the quality of our air, the equality of food or water. Or maybe I guess you can. Maybe you want to become a farmer and filter your own water, But the things around us are unfortunately damaging our body.

Hi, welcome to the MAPS webinar series, Killing Tomorrow's Future. We are thrilled to be bringing you this series packed with valuable information and education within our community.

My name is Honey Rinusella and I'm the Executive Director of MAPS, the Medical Academy of Pediatrics and Special Needs. Within these webinars, we're able to empower clinicians on the knowledge and tools to support patients facing a variety of health challenges.

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Meet the Speaker and Functional Medicine Background

That's www dot medmapps dot org. Thanks for joining us on this journey towards a brighter, healthier future. Yeah, Dr. Neuenschwander and I know each other.

We've known each for now what, like five years? Yep. And MAPS for about just a little shorter than that and live in and practice in Alpharetta, Georgia, but not new to functional medicine, have been doing that for, now, close to 20 years.

Background is family medicine. But never really got into much of family and medicine and, I mean, your background is Yeah, functional medicine was a key fit because who wants to keep writing prescriptions for symptoms?

Yeah. Absolutely. Well, you're one of the people that I listened to one your lectures and you started talking about these phospholipids and particularly plasmalogens.

And again, I always say there's these points in my life when I just sit there and go, why don't I know this stuff?

What Phospholipids Are and Why They Matter

So let's start out basic. I mean, what exactly is a phospho lipid? Well, a lot of people, you're right, are unfamiliar with the fossil lipid and basically is something made in the liver and it comes from what many people know as fats and oils.

Those are known as fatty acids in science. That's the scientific term for it. You get a couple of fatty acid, they make them modified into the next thing called a fossil-lipid combination.

Phosphate group, phosphate head group and you got yourself a phospholipid and there's four kinds. And why are those important? What do we use phospholypics for in the body?

Great question and this is the basis of health and wellness and life because if you're human and your alive, you need phospholypic. Every single cell and the interior of every single cells is made out of phospholepids.

It's so basic. that I think we don't even think about it. Okay, and I remember one of the first times that, I saw you

speak, you spoke about plasmolygens.

So what exactly is a plasmologen and how is that different from say a phospholipid like phosphatidylcholine or some of ones that we're much more familiar with?

The phospho lipids and plosmologens are cousins to each other and they have the exact, almost exact same structure except for one little bond, one is an ether bond and the other one's an ester bond.

And that is the only difference between a phospholipid and a plasmolygen. We are about 80% phospho lipids and about 20% plasmologens in the human body.

Okay. When we're dealing with We deal with these complex patients who are ill.

Plasmalogens, Membranes, and Organ Function

I mean, how do the phospholipids and how does membrane health play a role in those illnesses? How do you factor that in? So the problem nowadays is I wish we can roll back the clock and go back 100 years or so, but we And some things are just never going to change.

We can't change the quality of our air, the quantity of food or water. Or maybe, I guess you can. Maybe you want to become a farmer and filter your own water, but the things around us are unfortunately damaging our body and our cells, therefore.

And when I say cells we're damaging the phospholipids and plasmalogens. And as the more toxicity builds up, the worse this is going to get. And that's why I think one of the reasons why we're seeing so much medical conditions creep up over the past few decades.

Okay. How does that influence, say, brain function or immune function? I'm assuming those things are impacted by this? Yeah, the plasmologens especially are kind of concentrated in a few different places.

Brain is one of them. Fart, kidney, liver are the other places, and if you don't have enough of these things, then those organs will fail to function at normal or optimal levels.

Okay. And just to be clear, I mean, we can make plasmalogens? Yeah, in fact, all of them are made in the liver, the vast majority of the them, and some are in made the brain, but we got to have a healthy liver in order to do that.

And so, can I take a plasmalogen if my levels are low, or how do I try to improve those levels?

Testing, Treatment, and IV Support

So there's two ways. You want to try and make your own, if possible. That's always should be the right answer. But then if you can't make them for whatever reason, there are lots of different reasons for that.

You can take both plasmologens and they're called plasmalogen precursors and Dr. Don Goodenow is the manufacturer of those. And then there's the phospholipid part and you can those or get them even by IV.

Okay. How would I know if like if I have a client, they have Health issues, chronic health issues. How would I know that that's what I should be focusing in on?

I mean, what would clue me in? And are there blood tests? Are there ways to evaluate it biochemically? Yeah, as with many things in medicine, we should always measure things before taking things.

And there are blood test for both phospholipids, plasmolygens, and fatty acids. We can see what is low or what abnormal or normal. Okay. And then when I say we do this testing, there's abnormalities, what's your approach?

How do you move forward with your patients? What is your practice like? Because I know you do a lot more than I do, so maybe you could. Right. So based on the test results, Then we create a tailored treatment plan, and so the results dictate what should you get and how much and for how long.

And then, of course, we want to remeasure to see how things are changing. Clearly, there's the clinical aspect, like, clinically are you improving? Is your memory better?

Or the child with autism, are they speaking better or communicating better, or socializing? So we want to see clinical outcomes, and that does happen, but then we wanna see that the lab values are durable.

And then how do you determine, because I know you use IV phospholipids, how you do determine what kind of patient you would have to use that on versus, you know, using the standard phospho lipid sulfate?

So IV, I kind reserve it for, and I do have some very sick patients who can't even get out of bed and so on. tell from their laboratory values that they're very toxic and their buildup is tremendous.

And for those people, I kind of reserve IV for them. Or not that IVs, intravenous methods, are magical. They're not. It's just that it'll get you faster.

So it's kind like a car. Instead of going 30 miles an hour, you're going 65 miles and hour.

Toxins, Detoxification, and Maintenance

Okay. And then how do environmental toxins, what role do they play in the health of our membranes and with the functions of these phospholipids? Good gosh, there's so many environmental toxins nowadays.

There's too many to count, but they can damage our phospholypids. really fast, so can bad nutrition. But toxins, unfortunately, they can reside in our cells and just constantly create havoc there.

And I'm saying havoc, but they're damaging the phospholipids, their damaging their plasmalogens, and they are getting deteriorated. They're getting blown away.

The concept, of course, is yes, you can replace them. Really, what you want to do is detoxify and get the cell as clean as possible or all the cells in the body.

clean as possible. If I have somebody who's toxic and I do testing and there's deficiencies in the phospholipids, if I detox them, is that enough or would I still have to go after the phosphorus deficiency?

There comes a point where you go into what's called maintenance boat. That means that if I can use the analogy of a dental visit, if you have a bunch of cavities, we know those have to be fixed, repaired or extracted teeth.

But after that, then you'd go in every six months and then just do a little cleaning and you're good. And then we want to maintain like that, but you can maintain those phospholipids, plasmolygens by good lifestyle, good nutrition, physical activities, sleep and so on.

But taking a little bit helps us to make sure that we don't become toxic again or end up in a medical condition. Okay. Does mitochondrial function play a role with phospholipid formation?

Is that involved? I know that mitochondria function is dependent on the health of the phospho lipids, but is it the other way around as well? It's both, actually.

Mitochondrial health is very important. because the mitochondria is made out of phospholipids and plasmolytans. And for those who don't know, the Mitochondria, is the power pack of the cell.

It is where all of that energy, ATP is, made. There are some very specific kinds of fossil lipids called cardiolypin that

are absolutely necessary.

Mitochondria and Cellular Energy

If the mito-chandra is damaged, then the rest of cell actually suffers because it's not getting the electricity that it needs. And so then other things start to fail.

Okay. And the opposite is also true that those toxins will affect the mitochondria. Correct. One of the questions I always get from my patients is, here's all the things that are going wrong with me.

Here's the 500 supplements I need to take. Where would you put membrane health and phospholipids on that list? I can choose between phospho lipids or zinc.

How would consider the importance of those compounds? top of the list and the reason is, and I use the analogy with my patients and even other practitioners, it's like building a house.

You can't simply build a house without first framing the house. And so you wouldn't say, I'm going to build the House today. I'll go out and buy some appliances, electrical wire, windows, artwork, and carpets.

Before you even frame the houses, that doesn't make any sense. That's where I try to differentiate supplements versus phospholipids. Phospholippids are kind of like that house analogy.

If you frame a House and you put the roof on and the foundation, hey, now you can go in and drywall it electrical and plumbing and all of that can happen.

Phospholipids as a Foundation for Health

And so it is the most basic structure and function. So it has to be at the top of the list. I get this question or concern, like I took a supplement or I take a botanical, but it didn't seem to work for me.

And they're wondering why. Well, maybe the salad curtain accepted, or it accepted the nutrient in, but couldn't keep it there. And so that's how important fossil lipids and plasmolytans are.

And then I know there are supplements and I now you have an excellent phospholipid supplement. Are there food sources of these phospho lipids that we can use?

Yes, the best one is still egg yolks. Egg yolks have natural phosphorylcholine. and they have a bunch of other nutrients that are very beneficial as fatty acids, a best source of amino acids protein, that is.

It's all in one place, but eggs are the best sources. Egg yolks, I should say. Okay. Not monkey brains. I heard monkey brain. Tastes good. Might taste good, All right.

Anything else you want to tell our viewers about? Well, there is some. Yeah, I think we are in such a society of toxic milieu that we need to be proactive.

And I'm super happy to hear all of the things that are happening on with Robert F. Kennedy and the current administration. about trying to make America healthier again, and that's absolutely correct.

But that is here and now. The beauty of phospholipids and plasmolygens is that we can actually change the trajectory of future generations by what I call pre-conception medicine.

Food Sources and Pre-Conception Health

That means that now those who had children or planning on having children, or want to have more children I

should say, they can take fossil lipids now and they could detoxify their cells so their cell are the cleanest possible and their structure the best.

And by doing so and continuing that regimen, a woman can make sure that her baby is the healthiest possible upon delivery. Awesome. And so that future generations are just going to be more resilient, less chances for chronic medical conditions, neurological conditions and so on.

Well, how can people get a hold of you? Well two ways, and there's two things I offer. One is I teach practitioners how to utilize fatty acids, phospholipids, for those who want to get trained on the phospholipids and plasmal engines.

But if you need my help with your own condition or so on, you can reach me at fmg.health. All right. Well, thank you very much for taking the time to speak today.

It's been a real pleasure. And thank y'all for viewing this. We're at the MAPS conference, and this is the kind of information we get here. it's an awesome weekend so far.

Thanks again, Dr. Salgarthi. You're welcome. Appreciate it. Thanks so much for joining us today. I'm Honey Rinusella and this is MAPS. As we heal tomorrow's future, we appreciate you joining on the journey.

We'll see you next time.